

# The Psychological States of the Family of Suicide Attempters Admitted to the Emergency Department of Fukuoka University Hospital and the Effectiveness of Psycho-Education.

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## Abstract

**Background:** Suicidal behaviors affect seriously not only the patients themselves but also the family of a suicide attempter. However, the mental states of the family of a suicide attempter and effective interventions for them are poorly understood. The authors performed an intervention study that provides a psycho-education program for the family of the suicide attempters admitted to the emergency department in Fukuoka University Hospital.

**Objective:** To examine parts 1) the mental states of the family of suicide attempters admitted to the emergency department and 2) the effectiveness of a psycho-education program for them.

**Subject and method:** Subjects were the family of suicide attempters admitted to the emergency department in Fukuoka University Hospital from May 2013 to May 2014. We allocated 53 family members of May 2013 to October 2013 as the intervention group and 28 family members of November 2013 to May 2014 as the control group. The intervention group family received a psycho-education program and the control group received usual care. We evaluated their methods of suicide attempt, age, gender, history of psychiatric consultation, degree of relationship and whether they were first detectors or not. We also assessed their anxiety states, depressive symptoms, and post-traumatic stress symptoms by using State-Trait Anxiety Inventory (STAI), Self-rating Depression Scale (SDS), and Impact of Event Scale-Revised (IES-R) in a cross-sectional way in part 1. We followed them up at 1 and 3 months later in part 2.

**Results:** Part 1 indicated that the first degree family members were significantly higher than the non-first degree family members in STAI, the total score of IES-R, and the intrusion syndrome score of IES-R. The first detectors were significantly higher than the non-first detectors in STAI, and the intrusion syndrome score of IES-R. In part 2, two-way repeated measures analysis of variance indicated no significant difference between the intervention group (N=47) and the control group (N=20) in STAI, SDS, and IES-R. But differential analysis by extracting the first degree members indicated that the psycho-education intervention reduced STAI significantly in the intervention group (df=1, 46, F=4.582, p<.05). Sub effect test showed significant difference (46.4±7.8, 54.1±12.7, t=2.570, p<.05) at 1 month follow-up.

**Conclusion:** Of the family members of suicide attempters admitted to the emergency department, the first degree family members and first detectors showed more severe reaction against the suicide attempts. Psycho-education intervention indicated no significant difference between both groups. But differential analysis by extracting the first degree members indicated that the psycho-education intervention reduced STAI at 1 month follow-up.

**Key words:** emergency department, suicide attempt, support for family, psycho-education